### **ANNUAL REPORT FOR 2009**



Windsor Bypass Mitigation Sites Bertie County TIP No. R-2404A



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#### **SUMMARY**

The Windsor Bypass Mitigation Sites are located in Bertie County. The sites were planted in January 2009 and were mitigated for wetland impacts associated with roadway project R-2404A.

The mitigation encompasses approximately 1.3 acres at Site 14 and 0.02 acres at Site IP#1 total of wetland restoration. The restoration effort involved the removal of the temporary detour at Site 14. The restoration effort also, involved the removal of temporary fill and removal of a pipe extension along 20 linear feet of perennial stream channel at Site IP#1. The two sites will be monitored to ensure that it re-attains wetland jurisdictional status. No hydrologic monitoring is required for this project; however, vegetation monitoring is required for three years.

After the first year of monitoring, the Windsor Bypass Mitigation Sites show by visual observation that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

NCDOT proposes to continue vegetation monitoring at the Windsor Bypass Mitigation Sites.

#### 1.0 INTRODUCTION

#### 1.1 Project Description

The Windsor Bypass Mitigation Sites are located in Bertie County. Site 14 is located on Wakelon Road and Site IP#1 is located on a haul road for a borrow pit site just south off of Greens Cross Road. The sites consists of approximately 1.32 acres of mitigation for wetland impacts associated with roadway project R-2404A

#### 1.2 Purpose

In order for the mitigation sites to be considered successful, the sites must meet vegetation success criteria. This report details the vegetation monitoring in 2009 at the Windsor Bypass Mitigation Sites. Hydrologic monitoring was not required for the sites.

#### 1.3 Project History

January 2009 August 2009 Sites Planted Vegetation Monitoring (1 year)

### 2.0 VEGETATION: WINDSOR BYPASS MITIGATION SITES (YEAR 1 MONITORING)

#### 2.1 Success Criteria

Success Criteria states that the impacted areas where the onsite detour and pipe extension were removed shall be replanted using native species and must reattain wetland jurisdictional status at the end of three years.

#### 2.2 Description of Species

The following wetland species were planted in the Wetland Restoration Area:

Platanus occidentalis, American Sycamore

Betula nigra, River Birch

Prunus serotina, Black Cherry

#### 2.3 Results of Vegetation Monitoring

The impacted areas where the onsite detour and pipe extension were removed and re-vegetated is re-attaining wetland jurisdictional status and the planted species are surviving.

**Site Notes**: Other species noted include: *Juncus* sp., sedge, red bud, sweetgum, woolgrass, fennel, smartweed, and various grasses.

#### 2.4 Conclusions

There were approximately 1.32 acres of wetland restoration planted on site. There were no plots established on the site. By visual observation the Windsor Bypass Mitigation Sites show that the planted species are surviving and that the impacted areas are re-attaining wetland jurisdictional status.

#### 3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to continue vegetation monitoring at the Windsor Bypass Mitigation Sites.

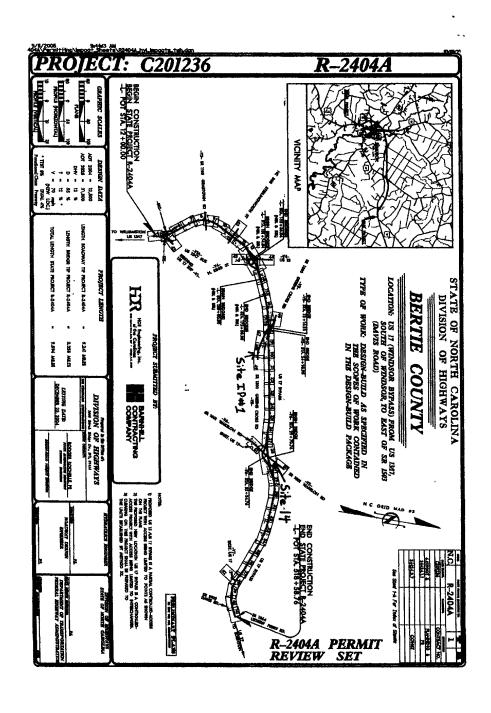


Figure 1. Site Location Map

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# APPENDIX A SITE PHOTOS

# Windsor Bypass Site 14



Photo 1



Photo 3



Photo 5



Photo 2

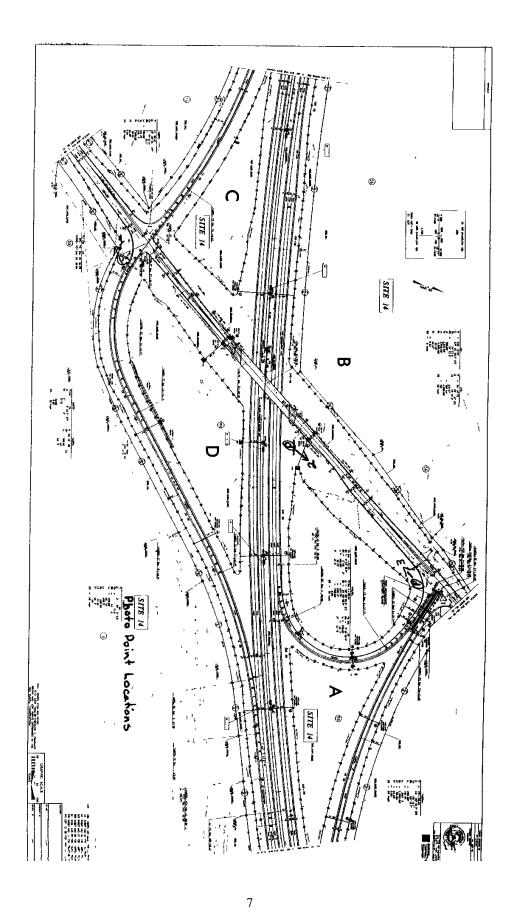


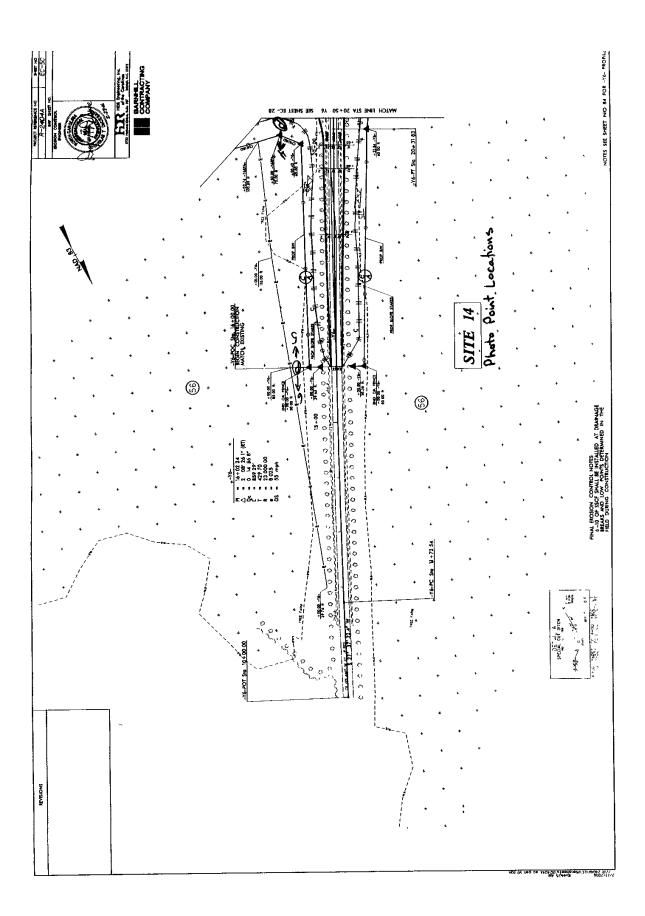
Photo 4



Photo 6

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## Windsor Bypass Site IP#1





August 2009



Photo 2